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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,026	10/23/2003	Jason Wolter Klein	30163.24681	2378
26781	7590	03/17/2006	EXAMINER	
BROUSE MCDOWELL LPA 388 SOUTH MAIN STREET SUITE 500 AKRON, OH 44311			STAICOVICI, STEFAN	
			ART UNIT	PAPER NUMBER
			1732	

DATE MAILED: 03/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/693,026

Applicant(s)

KLEIN ET AL.

Examiner

Stefan Staicovici

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 13-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-16 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/27/2004.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-11 and 13-16, drawn to a molding method, classified in class 264, subclass 257.
  - II. Claim 12, drawn to a product, classified in class 474, subclass 251.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions Group I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product as claimed can be made by another and materially different process, such as, providing a first mold for forming a preform having first teeth in a first step and then, in a second step forming second teeth in a second mold.
3. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Ms. Heather Barns on March 7, 2006 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-11 and 13-16. Affirmation of this election must be made by applicant in replying to this Office action. Claim

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12 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

#### ***Drawings***

6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: reference number “10” (see page 6, line 3). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

7. Claim 9 is objected to because of the following informalities: on line 2, after “pocket”, “is” should be replaced with --in--. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-2 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Cicognani (US Patent No. 3,934,968).

Cicognani ('968) teaches the claimed process for making a dual powered belt including, providing a first and a second mold half having first and second teeth forming cavities, forming a belt slab including a first fabric (21) (tooth forming fabric), a cord layer (22), an elastomeric layer (23) and a second fabric (24) (tooth forming fabric), placing said belt slab between said first and second mold halves and forcing said belt slab such that said first and second fabric is forced into said first and second cavities by said elastomeric layer to form said dual powered belt having a fabric layer covering first and second teeth (see col. 3, lines 12-48 and col. 4, lines 1-65 and, Figures 2-4).

10. Claims 1-2, 7-8 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Takano *et al.* (US Patent No. 4,510,113).

Takano *et al.* ('113) teach the claimed process for making a dual powered belt including, providing a first and a second mold half (18, 25) having first and second teeth forming cavities and an edge channel (71) for accommodating excess elastomeric material (see col. 6, lines 10-15), forming a belt slab including a first fabric (15) (tooth forming fabric), a cord layer (12), an elastomeric layer (13) and a second fabric (16) (tooth forming fabric), placing said belt slab between said first and second mold halves and forcing said belt slab such that said first and second fabric is forced into said first and second cavities by said elastomeric layer to form said dual powered belt having a fabric layer covering first and second teeth (see col. 1, line 47 through col. 4, line 20 and col. 5, lines 45-63 and, Figures 1 and 3).

### ***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cicognani (US Patent No. 3,934,968) in view of Wood (US Patent No. 5,733,399).

Cicognani ('968) teaches the basic claimed process as described above.

Regarding claims 3-5, although Cicognani ('968) teaches forcing said elastomeric (rubber) material into said first and second cavities such that said first and second fabric is pushed into said cavities by the flowing elastomeric material, Cicognani ('968) does not teach a barrier layer positioned adjacent to said first fabric layer and elastomeric material flowing through said barrier layer and said cord layer. Wood ('399) teaches a process for making a belt including providing a barrier layer through which elastomeric material flows such that said flowing elastomeric material forces a fabric layer into mold cavities to shape teeth of said belt (see col. 6, line 63 through col. 7, line 44). Therefore, it would have been obvious for one of ordinary skill in the art to provide the barrier layer of Wood ('399) in the dual power belt formed by the process of Cicognani ('968) such that elastomeric material flows through said barrier layer and a corresponding cord layer because, Wood ('399) teaches that such a barrier layer provides for improved pressure application, hence providing for an improved product.

13. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takano *et al.* (US Patent No. 4,510,113) in view of Wood (US Patent No. 5,733,399).

Takano *et al.* ('113) teach the basic claimed process as described above.

Regarding claims 3-5, although Takano *et al.* ('113) teach forcing said elastomeric (rubber) material into said first and second cavities such that said first and second fabric is pushed into said cavities by the flowing elastomeric material, Takano *et al.* ('113) do not teach a barrier layer positioned adjacent to said first fabric layer and elastomeric material flowing through said barrier layer and said cord layer. Wood ('399) teaches a process for making a belt including providing a barrier layer through which elastomeric material flows such that said

flowing elastomeric material forces a fabric layer into mold cavities to shape teeth of said belt (see col. 6, line 63 through col. 7, line 44). Therefore, it would have been obvious for one of ordinary skill in the art to provide the barrier layer of Wood ('399) in the dual power belt formed by the process of Takano *et al.* ('113) such that elastomeric material flows through said barrier layer and a corresponding cord layer because, Wood ('399) teaches that such a barrier layer provides for improved pressure application, hence providing for an improved product.

14. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cicognani (US Patent No. 3,934,968) in view of Takano *et al.* (US Patent No. 4,510,113).

Cicognani ('968) teaches the basic claimed process as described above.

Regarding claims 7 and 8, Cicognani ('968) does not teach an edge channel for accommodating excess elastomeric (rubber) material. Takano *et al.* ('113) teach a process for making a dual powered belt including, providing a first and a second mold half (18, 25) having first and second teeth forming cavities and an edge channel (71) for accommodating excess elastomeric material (see col. 6, lines 10-15). Therefore, it would have been obvious for one of ordinary skill in the art to provide an edge channel for accommodating excess elastomeric material as taught by Takano *et al.* ('113) to the mold in the process of Cicognani ('968) because of known advantages such as reduced costs by eliminating a finishing operation, hence providing for an improved process.

15. Claims 7, 9, 11 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cicognani (US Patent No. 3,934,968) in view of Campbell *et al.* (US Patent No. 4,540,357).

Cicognani ('968) teaches the basic claimed process as described above.



Regarding claims 7, 9, 11 and 13, Cicognani ('968) does not teach a waste pocket for accommodating excess elastomeric (rubber) material. Campbell *et al.* ('357) teach a process for making a belt including, providing a mold having nub cavities (23) for accommodating excess elastomeric material (see col. 5, lines 48-64). Therefore, it would have been obvious for one of ordinary skill in the art to provide the nub cavities taught by Campbell *et al.* ('357) to the mold in the process of Cicognani ('968) in order to accommodate excess elastomeric material because of known advantages such as reduced costs by eliminating a finishing operation, hence providing for an improved process.

In regard to claims 14-16, although the process of Cicognani ('968) in view of Campbell *et al.* ('357) does not teach a finishing (deflashing) operation such as, grinding or milling, finishing a molded object is well known. Therefore, it would have been obvious for one of ordinary skill in the art to provide a finishing operation such as, grinding or milling, in the process of Cicognani ('968) in view of Campbell *et al.* ('357) because of known advantages such improved aesthetics and dimensional tolerances, hence providing for an improved product.

16. Claims 7, 9, 11 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takano *et al.* (US Patent No. 4,510,113) in view of Campbell *et al.* (US Patent No. 4,540,357).

Takano *et al.* ('113) teach the basic claimed process as described above.

Regarding claims 7, 9, 11 and 13, Takano *et al.* ('113) do not teach a waste pocket for accommodating excess elastomeric (rubber) material. Campbell *et al.* ('357) teach a process for making a belt including, providing a mold having nub cavities (23) for accommodating excess elastomeric material (see col. 5, lines 48-64). Therefore, it would have been obvious for one of

ordinary skill in the art to provide the nub cavities taught by Campbell *et al.* ('357) to the mold in the process of Takano *et al.* ('113) in order to accommodate excess elastomeric material because of known advantages such as reduced costs by eliminating a finishing operation, hence providing for an improved process.

In regard to claims 14-16, although the process of Takano *et al.* ('113) in view of Campbell *et al.* ('357) does not teach a finishing (deflashing) operation such as, grinding or milling, finishing a molded object is well known. Therefore, it would have been obvious for one of ordinary skill in the art to provide a finishing operation such as, grinding or milling, in the process of Takano *et al.* ('113) in view of Campbell *et al.* ('357) because of known advantages such improved aesthetics and dimensional tolerances, hence providing for an improved product.

17. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cicognani (US Patent No. 3,934,968) in view of Schwabauer (US Patent No. 4,095,480).

Cicognani ('968) teaches the basic claimed process as described above.

Regarding claim 6, Cicognani ('968) does not teach forming said belt slab into a cylinder prior to placing said belt slab into a mold. However, whether the belt slab is preformed prior to placing into said mold or is directly placed into said mold does not appear to have any unexpected results and as such it is submitted that teach forming said belt slab into a cylinder prior to placing said belt slab into a mold is an equivalent alternative to directly placing said belt slab into said mold. Further, it is noted that forming said belt slab into a cylinder prior to placing said belt slab into a mold is well known as evidenced by Schwabauer ('480) who teaches a process for making a belt including forming a belt slab into a cylinder onto a building lathe or

drum and then placing said preform into a mold for molding said belt (see col. 3, lines 12-24). Therefore, it would have obvious for one of ordinary skill in the art to form said belt slab into a cylinder prior to placing said belt slab into a mold as taught by Schwabauer ('480) in the process of Cicognani ('968) because of known advantages such simplicity and improved dimensional tolerances by controlling positioning of the different layers during the performing of the belt slab, hence providing for an improved product and also because, forming said belt slab into a cylinder prior to placing said belt slab into a mold is an equivalent alternative to directly placing said belt slab into said mold.

18. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takano *et al.* (US Patent No. 4,510,113) in view of Schwabauer (US Patent No. 4,095,480).

Takano *et al.* ('113) teach the basic claimed process as described above.

Regarding claim 6, Takano *et al.* ('113) do not teach forming said belt slab into a cylinder prior to placing said belt slab into a mold. However, whether the belt slab is preformed prior to placing into said mold or is directly placed into said mold does not appear to have any unexpected results and as such it is submitted that teach forming said belt slab into a cylinder prior to placing said belt slab into a mold is an equivalent alternative to directly placing said belt slab into said mold. Further, it is noted that forming said belt slab into a cylinder prior to placing said belt slab into a mold is well known as evidenced by Schwabauer ('480) who teaches a process for making a belt including forming a belt slab into a cylinder onto a building lathe or drum and then placing said preform into a mold for molding said belt (see col. 3, lines 12-24). Therefore, it would have obvious for one of ordinary skill in the art to form said belt slab into a

cylinder prior to placing said belt slab into a mold as taught by Schwabauer ('480) in the process of Takano *et al.* ('113) because of known advantages such simplicity and improved dimensional tolerances by controlling positioning of the different layers during the performing of the belt slab, hence providing for an improved product and also because, forming said belt slab into a cylinder prior to placing said belt slab into a mold is an equivalent alternative to directly placing said belt slab into said mold.

### ***Conclusion***

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Staicovici, Ph.D. whose telephone number is (571) 272-1208. The examiner can normally be reached on Monday-Friday 9:30 AM to 6:00 PM.



If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael P. Colaianni, can be reached on (571) 272-1196. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stefan Staicovici, PhD

   
Primary Examiner 3/12/06

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March 12, 2006